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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/998,887	10/31/2001	Ian J. McLaughlin	ABI-0034	7264

7590 05/07/2003  
Woodcock Washburn LLP  
46th Floor  
One Liberty Place  
Philadelphia, PA 19103

EXAMINER

SIEW, JEFFREY

ART UNIT	PAPER NUMBER
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1637

DATE MAILED: 05/07/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/998,887

Applicant(s)

MCLAUGHLIN ET AL.

Examiner

Jeffrey Siew

Art Unit

1637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-43 and 52-65 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,23,25-27,52-54,57 and 60-65 is/are rejected.
- 7) ☒ Claim(s) 2-22,24,28-43,55,56,58,59 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.                      6) ☐ Other: \_\_\_\_\_

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## DETAILED ACTION

### *Specification*

1. In the Brief Description of Drawings Figure 4 is described but no Figure 4 exists. Figures 4A & 4B are not described.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,25,26,27 are rejected under 35 U.S.C. 102(b) as being anticipated by Slater et al (US6,077,664 June 20, 2000).

Slater et al teach thermophilic DNA polymerases from *Thermotoga neopolitana* in PCR reactions with sorbitol or DMSO (see whole doc. esp. col. 29 lines 45-65 & col. 83 lines 1-5).

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 23,52,60,62 rejected under 35 U.S.C. 103(a) as being unpatentable over Hoshina et al (US5,571,674 Nov. 5, 1996) in view of Slater et al (US6,077,664 June 20, 2000).

Hoshina et al teach amplifying ribosomal DNA from bacteria and testing clinical samples from gastric such as blood or cerebrospinal fluid (see whole doc. esp. abstract & col.2 0 line 37)

Hoshina et al do not teach amplification with sorbitol

Slater et al teach thermophilic DNA polymerases from *Thermotoga neopolitana* in PCR reactions with sorbitol or DMSO (see whole doc. esp. col. 29 lines 45-65 & col. 83 lines 1-5).

One of ordinary skill in the art would have been motivated to apply Slater et al's polymerase and sorbitol reaction conditions to Hoshina et al's ribosomal DNA in order to amplify the ribosomal sequences. Slater et al state that their reaction conditions allow for high fidelity long amplifier polymerizations (see col. 82 line 54). It would have been prima facie obvious to apply Slater et al's polymerase and sorbitol reaction conditions to Hoshina et al's ribosomal DNA in order to amplify long target sequences with high fidelity.

4. Claims 52-54,57,60-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoshina et al (US5,571,674 Nov. 5, 1996) in view of Dandiker et al (US5,606,045 Feb 25, 1997).

Hoshina et al teach amplifying ribosomal DNA from bacteria and testing clinical samples from gastric such as blood or cerebrospinal fluid (see whole doc. esp. abstract & col.2 0 line 37)

Hoshina et al do not teach amplification with sorbitol

Dandiker et al teach amplification with sorbitol and DMSO (see col. 15 line 55-60).

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One of ordinary skill in the art would have been motivated to apply Dandiker et al's DMSO and sorbitol reaction conditions to Hoshina et al's ribosomal DNA in order to amplify the ribosomal sequences. Dandiker et al teach successful amplification with DMSO and sorbitol. It would have been prima facie obvious to apply Dandiker et al's dmsO and sorbitol reaction conditions ot Hoshina et al's ribosomal sequence in order to successfully amplify cDNA transcripts.

### SUMMARY

5. Claims 2-22,24,28-43 & 55,58,59 are objected to for depending on a rejected claim. Concerning claims 2-22,24,28-43 there is no prior art that teach or suggest PCR reaction with both dMSO and sorbitol. Concerning claims 55,58 & 59 there is no prior art that teach or suggest sorbitol amplification with one of the claimed DNA polymerases.

### CONCLUSION

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Siew whose telephone number is (703) 305-3886 and whose e-mail address is Jeffrey.Siew@uspto.gov. However, the office cannot guarantee security through the e-mail system nor should official papers be transmitted through this route. The examiner is on flex-time schedule and can best be reached on weekdays from 6:30 a.m. to 3 p.m.

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If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Gary Benzion, can be reached on (703)-308-1119.

Any inquiry of a general nature, matching or filed papers or relating to the status of this application or proceeding should be directed to the Tracey Johnson for Art Unit 1637 whose telephone number is (703)-305-2982.

Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CM1 Center numbers for Group 1600 are Voice (703) 308-3290 and Before Final FAX (703) 872-9306 or After Final FAX (703) 30872-9307.

  
JEFFREY SIEW  
PRIMARY EXAMINER

May 4, 2003